SRT 5428S

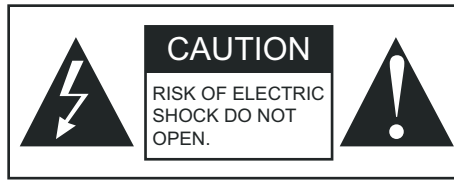
High Definition Digital Terrestrial Receiver

User Manual

Table of contents

1 INTRODUCTION 4
2 MAIN FUNCTIONS AND FEATURES 4
3 THE REMOTE CONTROL 5
4 FRONT AND REAR PANEL 7
4.1 REAR PANEL 7
4.2 FRONT PANEL 7
5 INSTALLATION 8
5.1 CONNECTING THE RECEIVER 8
5.2 INSTALLATION GUIDE 9
6 DAILY USE 9
6.1 INFO. KEY 9
6.2 AUDIO KEY 10
6.3 SUB KEY 10
6.4 RES. KEY 10
6.5 ASPECT RATIO 11
6.6 EPG 12
6.7 TV CHANNEL AND RADIO CHANNEL LIST 12
6.8 FAVOURITE CHANNEL 12
6.9 DVR FUNCTION 13
6.9.1 INSTANT RECORDING 13
6.9.2 EPG RECORDING 13
6.9.3 TIMER RECORDING 14
6.9.4 TIMESHIFT 14
6.9.5 PLAYBACK RECORDED PROGRAM 14
6.9.6 MULTIMEDIA PLAYER 15
6.9.7 FORMAT PORTABLE HARD DISK 15
7 MENU 16
7.1 MAIN MENU 16
8 SOFTWARE UPDATE INSTRUCTIONS 17
8.1 COPY THE UPDATE FILE TO A USB DRIVE FROM A PC 17
8.2 UPDATE THE RECEIVER BY USB INTERFACE 17
SPECIFICATION 18

IMPORTANT SAFETY INSTRUCTIONS



TO REDUCE THE RISK OF ELECTRIC SHOCK.
DO NOT REMOVE COVER.
NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.

This symbol indicates important instructions accompanying the product.

Warranty Information

This product comes with a 12 month manufacturer's warranty from the date of purchase.

This unit has a 30 day replacement warranty for manufacturing faults.

Within this period please return the faulty product with all its supplied accessories to either the place of purchase or *STRONG* Australia accompanied by the original purchase receipt.

After this 30 day period the unit must be returned to *STRONG* Australia for testing, and if deemed faulty, will be repaired or replaced at the discretion of *STRONG* Australia Pty Ltd.

The faulty product can either be sent to *STRONG* Australia directly or via your place of purchase for evaluation.

***STRONG* Australia will cover any costs incurred in returning the faulty product for evaluation should the product be deemed as genuinely faulty. If the product is found to have no fault, the costs incurred in delivering product to and from *STRONG* Australia will be incurred by the customer.**

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

STRONG Australia PTY LTD.
60 WEDGEWOOD ROAD, HALLAM, VICTORIA 3803
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1 INTRODUCTION

This user manual is intended to guide you through the operation for the SRT 5428S DVB-T FTA High Definition Digital Terrestrial Receiver.

The password may be required to make changes in the advanced option. Default password is "000000".

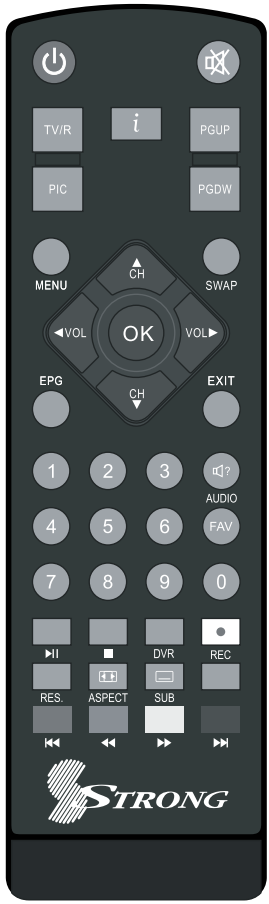
2 MAIN FUNCTIONS AND FEATURES

This product is a high performance and cost-effective HDTV Terrestrial receiver. It fully complies with DVB-T FTA receiver requirement specifications. It provides users with all digital terrestrial TV and radio signals being broadcast in Standard Definition or High Definition.

Functions

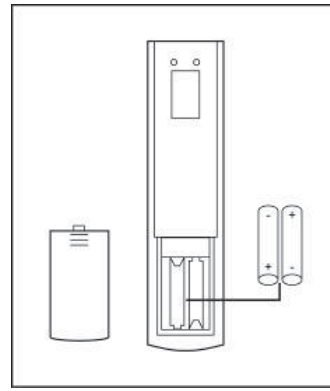
1. Fully compatible with DVB-T FTA digital standard.
2. Fully compatible with MPEG-4 H.264/AVC High Definition Digital TV.
3. Fully compatible with MPEG-2 High Definition and Standard Definition Output.
4. Fully compatible with MPEG-1 Layer I & II, Dolby Digital Audio.
5. VHF & UHF input and LOOP OUT.
6. 1000 Channels capacity.
7. Fully support to Electronic Program Guide(EPG).
8. Support Auto search and Manual search.
9. Parental control for channels.
10. Plug and Play installation with an ease to use Menu System.
11. Optical S/PDIF Digital audio output interface.
12. Support 576i, 576p, 720p, 1080i, 1080p Video Resolution.
13. Support 4:3 and 16:9 Aspect Ratio.
14. DVB or EBU subtitle selected by the system based on availability on the network.
15. Various channel editing function(Favorites, Move, Lock, Delete).
16. Support HDMI High Definition Multimedia Interface.
17. Software upgrade via USB2.0 interface.
18. High sensitivity, low Eb/No for receiving Digital Television.
19. USB 2.0 interface DVR and Media Player.
20. Record digital television FTA program to a USB Flash Drive or an external USB portable hard disk and playback via USB2.0.

3 THE REMOTE CONTROL

Photograph	Key	Function
	MUTE	Disable Audio output
	STANDBY	Standby/on
	0…..9	0-9 numeric buttons, for input of numbers or for selecting a TV channel
	SWAP	Recall last channel while watching digital TV or listening to radio.
	TV/R	Press TV/R key to switch between TV program and Radio program.
	RED	Function key in different page.
	GREEN	Function key in different page.
	YELLOW	Function key in different page.
	BLUE	Function key in different page.
	MENU	Display menu, press again to exit current menu
	EXIT	Back to previous menu
	INFO.	Press INFO. Key to display the information bar during watch program.
	EPG	Press EPG key to display 7 days EPG information.
	UP/DOWN	Move selection up/down within menus and lists, Select next/previous channel
	LEFT/RIGHT	While watching a channel, the LEFT/RIGHT buttons decreases or increases the audio output volume. Within a menu, press the LEFT button to return to previous menu and the RIGHT button to next menu
	OK	Call up a program list for the current channel while watching digital/TV or listening to the radio. In a menu, this button serves to confirm a selection.
	PGUP/PGDW	Page up/down in lists
	FAV	Display favorites channel
	DVR	Display DVR manager page
	REC	Press REC key to record the current program during watch TV program
	STOP	Press STOP key to stop recording program or stop program during watch PVR program.
	PLAY/PAUSE	Playing or pause the program during watch DVR program
	PIC.	Press PIC. key to select the picture settings
	ASPECT	Press ASPECT key to select suitable aspect ratio of the video output
	SUBTITLE	Switch between different subtitles
	AUDIO	Press AUDIO key to set the audio track and audio mode
	RES.	Switch resolutions of video output

Battery Installation

Insert the batteries while observing the correct (+) and (-) polarities as illustrated below:



About the batteries

- If the remote control unit fails to work even when it is operated near the set top box, please replace the batteries.
- Use size UM-4 (AAA) batteries.
- Do not use rechargeable (Ni-Cd) batteries.
- Do not attempt to recharge, short circuit, disassemble heat or throw the batteries into the fire.
- Do not drop, step on or cause any impact to the remote control unit. This may damage it, resulting in malfunction.
- Do not mix old and new batteries.
- If the remote control unit is not going to be used for a long time, remove the batteries.

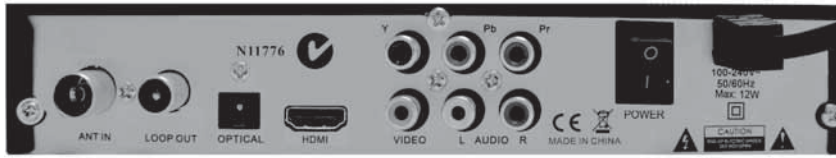
Caution

Keep batteries out of children's reach. If batteries are swallowed, contact a physician immediately.

4 FRONT AND REAR PANEL

4.1 REAR PANEL

（Pictures & Descriptions are for reference only, subject to our actual exiting products.）



Rear Panel	
ANT IN	Digital Terrestrial TV Broadcast signal input
Loop OUT	Output of antenna signal
HDMI	Digital HDTV video output with HDCP
Video	Composite video signal output
YPbPr	High Definition Component video output
Optical	Digital audio output
Audio L/R	Analogue Audio output
AC	AC 100-240V Power input

4.2 FRONT PANEL

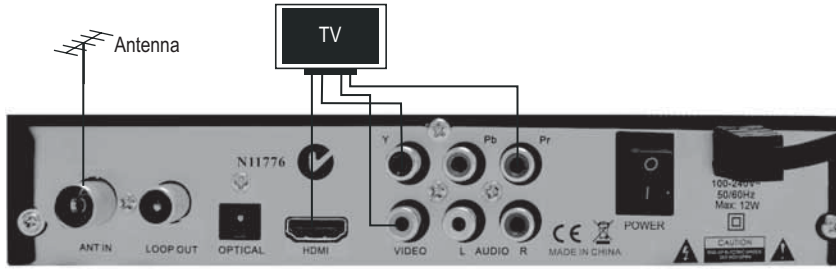
The red LED is a power indicator and the green LED is a signal indicator.
User can access those function keys as follow: Standby, CH▲, CH▼, VOL◄ and VOL►.

5 INSTALLATION

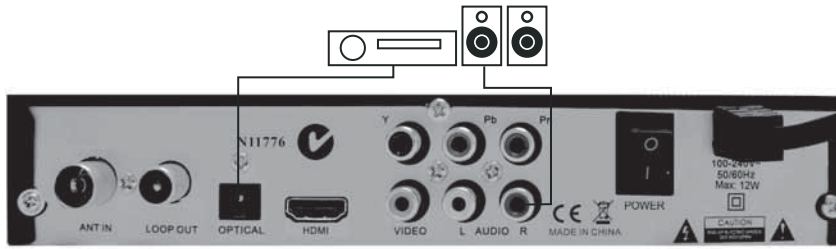
5.1 CONNECTING THE RECEIVER

Connect the antenna to the receiver.

Connect the receiver to your TV set using the Composite (Yellow socket for Video, White and Red sockets for Audio, AV Cable Supplied with receiver), Component (Red, Green and Blue for Video, White and Red for Audio, Cable Sold Separately) or HDMI connections. (Cable Sold Separately)



Connect the receiver to an amplifier using either Optical Digital Audio Output or the Analogue Audio Output (Red and White Sockets, AV Cable Supplied with receiver)



5.2 **INSTALLATION GUIDE**

Follow the installation guide to enjoy your high definition digital television receiver. Follow the help information at the bottom of the window to select Country, Menu Language. Press OK button start channel search.

If no or some channels are not found during the channel searching process, please have your antenna system checked by an antenna specialist.

6 DAILY USE

6.1 **INFO. KEY**

Press the “INFO” key to display information bar while viewing TV programs. Press the “INFO.” key twice to display detailed program information while viewing TV programs.

Basic information bar

ABC HDTV
11:00-11:34 Potatoes And Dragons
11:34-12:00 M.I. High
Frequency:536.5MHz
Bandwidth:7MHz
Potatoes And Dragons
Page: 1 / 1
Lyn Verox, the fashion designer, wants to create a gown out of dragon scales. Riri suggests waiting until he sheds his skin. But dragons shed only if they don't get annoyed!
Quality
100%
EXIT
Page Down
Page Up

Extended information bar.

6.2 **AUDIO KEY**

The program may have multilingual audio language and the audio broadcast on different audio mode such as Left or Right. All the available audio languages will be displayed on the audio track window when you press the AUDIO key. The screenshot illustrates this. If there is no audio output after you select the audio language, it indicates that there is no audio on the current audio mode, so you have to select the preferable audio mode.

6.3 **SUB KEY**

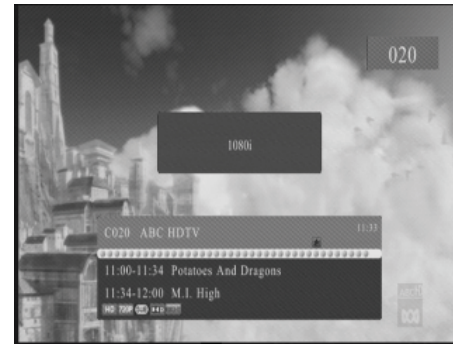
The program may have multilingual subtitle information. All available subtitle languages will be displayed in the subtitle information window when you press the SUBTITLE key. The screenshot illustrates this. Follow the help information on the subtitle windows to select preferred subtitle.

a) Press SUB key to display all the subtitle languages while watching TV.
b) Press UP/DOWN key to move and Press OK key to select the subtitle language.
c) Press SUB or EXIT key to exit the subtitle language menu.

Note：if you select the Subtitle Language to OFF，the subtitle language will disappear

6.4 **RES. KEY**

The video programs may have different resolutions 720×576i/p, 1280×720p, 1920×1080i and 1920 × 1080p Normally, the standard definition programs have 720×576i and high definition programs have 1280 × 720p,1920×1080i and 1920×1080p In order to receive excellent quality on the TV screen, press the RES key on the remote control to display the resolution control window. The screenshot illustrates this. In the resolution window you will find 576i, 576p, 720p, 1080i and 1080p.

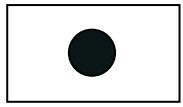


6.5 **ASPECT RATIO**

The aspect ratio of the video can be 4:3 (also know as Anamorphic Image) or 16:9 (also know as widescreen TV). In order to receive the correct aspect ratio for your TV set, press the ASPECT key to set suitable aspect ratio for your TV. The screenshot of the aspect ratio window is illustrated.

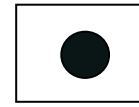
Here is a description of the aspect ratio options. Set the desired aspect ratio in relation to your TV type.

16:9 Stream on a 16:9 TV



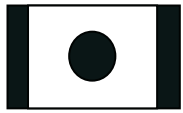
Whatever the mode

4:3 Stream on a 4:3 TV

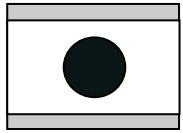


Whatever the mode

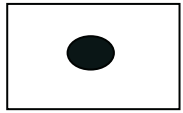
4:3 Stream on a 16:9 TV



Letter-box

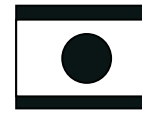


Pan and scan

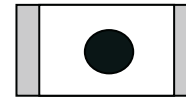


Full Screen

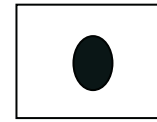
16:9 Stream on a 4:3 TV



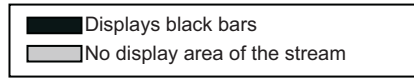
Letter-box



Pan and scan



Full Screen

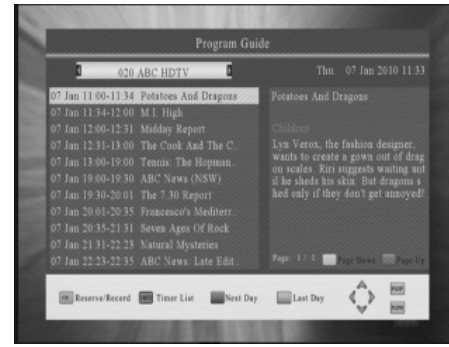


6.6 **EPG**

Press the EPG key to display the on screen Electronic Program Guide. This displays a 7 Day Electronic Program Guide for all programs being broadcast from all broadcasters.

1、 Top of information is a current date.
2、 Press UP/DOWN key to move to the service.
3、 Press OK key to select current service to Schedule view or recording.
4、 Press INFO key to display Schedule scheme.
5、 Press GREEN key to display the current Channel previous Day from weekly EPG information.
6、 Press RED key to display the current Channel Next Day information form weekly EPG.

Press EXIT key to exit the EPG Menu.


Program Guide
020 ABC HDTV
Thu 07 Jan 2010 11:33
07 Jan 11:00-11:34 Potatoes And Dragons
07 Jan 11:34-12:00 M.I. High
07 Jan 12:00-12:31 Midday Report
07 Jan 12:31-13:00 The Cook And The C..
07 Jan 13:00-19:00 Tennis: The Hopman..
07 Jan 19:00-19:30 ABC News (NSW)
07 Jan 19:30-20:01 The 7.30 Report
07 Jan 20:01-20:35 Francesco's Mediterr..
07 Jan 20:35-21:31 Seven Ages Of Rock
07 Jan 21:31-22:23 Natural Mysteries
07 Jan 22:23-22:35 ABC News: Late Edit..
Potatoes And Dragons
Children
Lyn Verox, the fashion designer, wants to create a gown out of drag on scales. Riri suggests waiting unt il he sheds his skin. But dragons s hed only if they don't get annoyed!
Page: 1 / 1
Page Down
Page Up
Reserve/Record
Timer List
Next Day
Last Day

6.7 **TV CHANNEL AND RADIO CHANNEL LIST**

Press the OK key to display a list of available TV and Radio channels. Follow the help information at the bottom of the window to select the preferred channel.

6.8 **FAVOURITE CHANNEL**

You can add preferred channels to a favourite's channel list on the channel edit window. Press FAV key to launch your favourite's channel list.

i. Press the FAV key to display the favourite list.
ii. Press the UP/DOWN key to select the preferred list you want and press the OK key.
iii. Press the LEFT/RIGHT key to switch the favourite type.
iv. Press the EXIT key to close the favourite list.

6.9 **DVR FUNCTION**

By connecting an external USB disk or USB Hard Drive (sold separately) you can Record, Timeshift and Playback TV programs. There are 3 types of recording options, they are:

6.9.1 Instant recording

Press the REC key to start an instant recording of the current TV program being viewed. The recording symbol will be displayed on the top left hand corner of the screen. The default recording time is 3 Hours. To adjust the recording time, press the REC key again. This will display the recording time screen. Using the numeric keys, enter the desired recording time in hours and minutes. Press the INFO key to receive further information of the instant recording. Press the STOP key to stop the instant recording. Press OK to confirm you wish to stop the instant recording.

6.9.2 EPG recording

You will never miss your favourite program again by selecting programs to be recorded via the EPG.
Press the EPG key to display the Electronic Program Guide. Highlight the program you wish to record using the left and right arrow keys.
Press OK key on the selected program to set the EPG recording.
You can edit or delete the scheduled EPG recording event in the schedule window which is now displayed.

1. Press LEFT/RIGHT key to choose the channel .
2. Press LEFT/RIGHT key to choose the Schedule Mode.
3. Press “0…9” number key on the remote control to set the Event time.
4. Press OK key to confirm.
5. Press EXIT key to exit.

6.9.3 Timer recording

You can set a manual timer recording to record at specific time.
Press the EPG key and the press the INFO key. This will display the Schedule window. In this menu select the parameters of the time frame to be recorded. Channel Type, Channel No., Start Time and End Time, Repeat and Mode

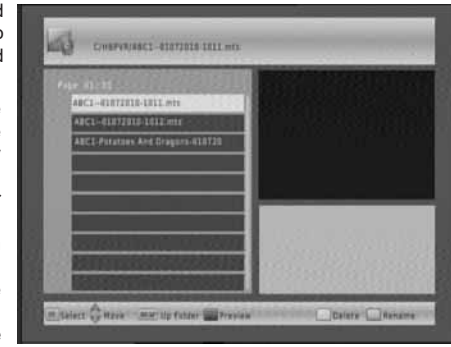
6.9.4 Timeshift

Press the REC key to start Recording first，then Press the Play key to start the timeshift function. While timeshifting Press the YELLOW key to FF. or Press the GREEN key to REW. Speeds supported are X2、X4、X8、X16、X32. Press the pause key to pause the program during live viewing.
Press the STOP key to stop the timeshift function, you also must press the STOP key again to stop the Recording

6.9.5 Playback recorded program

Press DVR key to display the recorded program. Follow the help information to preview, playback the recorded program and edit the recorded program.

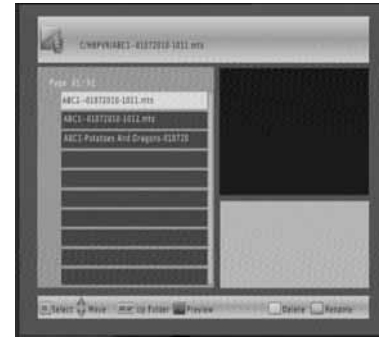
1. Press UP/DOWN key on the remote control to move the cursor in the recorded program list and press OK key to play highlighted file.
2. Press Swap key to return to upper folder/menu;
3. Press RED key to switch between Preview/Full screen;
4. Press GREEN key to Rename the current file while the file is not playing.
5. Delete highlight the file then press the Yellow key while the files is not playing.



6.9.6 Multimedia player

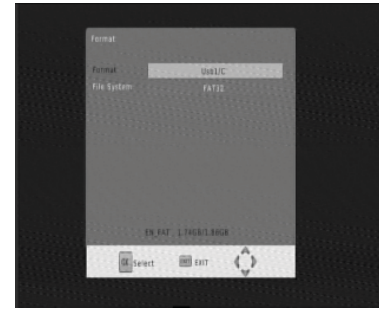
A Multimedia player feature is integrated into the receiver. Press the MENU key and select USB using the UP and DOWN arrow keys. Press the OK key and select Multimedia to display the multimedia player window. In this window you have a choice of MUSIC, PHOTO, MOVIE and DVR. Select your preference using the UP and DOWN arrow keys and press the OK key. Supported files are listed below. NTFS, FAT32 file systems are supported.

Player	Supported file
Photo	JPEG, BMP, PNG
Music	*.wma, *.mp3, *.m4a, *.aac
Movie	*.avi, *.mpg, *.dat, *.vob, *.div, *.mov, *.mkv, *.mjpeg, *.ts, *.trp, motion jpeg



6.9.7 Format portable hard disk

Formatting of a hard disk function is also available. Formatting your hard disk will delete all the data on the hard disk. It is strongly recommended to backup all the data on the hard disk prior to formatting.



7 MENU

7.1 **MAIN MENU**

Most functions are available via the Main Menu. Follow the operation help information on the bottom of the menu window to modify your preferences. A password will be required when attempting to modify the settings. **Please note the Default password is “000000”.**

8 SOFTWARE UPDATE INSTRUCTIONS

8.1 COPY THE UPDATE FILE TO A USB DRIVE FROM A PC

1. Please visit the STRONG Australia website at www.strong.com.au or contact our customer service department on 1800 820 030 to obtain the latest software for updating your receiver.
2. Plug the USB drive to the PC and backup the entire data of the USB drive. Right click the USB drive and select Format item. Format the USB drive as FAT32 file system.
3. Copy the update file that is named, for example “SRT5428S.AP” to the root of the USB drive. Then remove the USB drive from the PC.

Warning: The USB interface is for software upgrade of the Receiver is only possible by using a USB Flash Drive with FAT32 file system format. The USB interface does not support USB Flash drives with U3 PRO System. Never connect a portable hard disk to the USB interface of the Receiver for software updates.

8.2 UPDATE THE RECEIVER BY USB INTERFACE

1. Plug the USB drive that with the update file to the USB interface of the receiver.
2. Go to main menu and press “666666” to start upgrade process. When the upgrade progress has reached 100% and the update has finished, remove the USB flash drive power off and power on the receiver again.
3. Please set the receiver to the factory default setting via the main menu once it has rebooted

NOTE: Please do not remove the USB drive from the receiver and power off the receiver during upgrading process. Otherwise the receiver may not work properly.

9 SPECIFICATION

Tuner	
Input Connector	IEC 16902. Female
Input Frequency Range	VHF&UHF
Num of RF Inputs	1
Input impedance	75 ohm
RF output Connector	(bypass)IEC 169-2 Male
Loop through	47-862 MHz

Demodulation	
Standard	ETSI EN300 744
Guard interval Modes	1/32,1/16,1/8 Active Symbol duration
FEC Modes Rate	1/2,2/3,3/4,5/6,7/8
Carriers/Constellation	All modes supported including non hierarchical
Demodulation	COFDM(QPSK/QAM16/QAM64) 2K and 8K
Network	MFN
Channel bandwidth	7 MHz wide channel

System Resources	
SDRAM memory	64 MB DDR2 SDRAM
FLASH memory	4 MB NOR FLASH
Display Panel	7 SEGMENTS LED
Graphic resolution	ARGB8888

Video Decoder	
Standard	ISO/IEC 13818-2 and ISO/IEC 14496-10
Transport stream	ISO/IEC 13818-1
Video decoding	MPEG-2 SD/HD (MP@ML and MP@HL), MPEG-4 H.264/AVC SD/HD JPEG,BMP,PNG, Motion JPEG AVI, VOB, MOV, MKV
Aspect ratio	4:3, 16:9

Audio Decoder	
Standard	ISO/IEC13818-3 TR1011154
Audio decoding	MPEG-1 and MPEG-2 Layer I & II, Dolby Digital Audio, E-AC3,WMA and HE-AAC Digital Audio
Dolby Digital (AC-3)	Stereo down-mixing to analog and digital audio outputs (including HDMI). For digital outputs, L-PCM stereo encoding is provided
Sample rate	32 kHz, 22.1 kHz, 44.1KHz,48 kHz

Subtitles & Teletext	
Subtitle	DVB Subtitle

Rear Panel	
ANT IN	Digital Terrestrial TV Broadcast signal input
Loop OUT	Output of Digital Terrestrial TV Broadcast signal
HDMI	Digital HDTV video output with HDCP. HDMI
Video	Composite video signal output
YPbPr	High Definition Component video output
Optical	Digital audio output
Audio L/R	Analog Audio output
AC	AC 100-240V Power input

Front Panel	
bi-colored LED	Red / Green to indicate the various states of the STB
7-segments LED	To display the channel number or/and other information
Keys	5 KEYS(Standby, CH▲, CH▼, VOL◄, VOL►)

Accessories	
Remote control unit	IR (36kHz)RC3/ other on request(38kHz)NEC
Batteries	2 xAAA
User Manual	1 in English
RCA cable	1

Power	
AC input range	100-240V
Power consumption	<8W WITHOUT PVR
Standby consumption	<1W

Physical	
Operating Temperature	+5 ~ 45 °C
Storage Temperature	-10 ~ +70 °C
Size (L x W x H) (mm)	220*150*40mm
Size packaging	225*225*60mm
Weight	<1KGS

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